according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230

Version 1.0

Revision Date 09.01.2014

Print Date 10.02.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Bronzing Powder – Art. 48210 / 48220 / 48230

1.2 Relevant identified uses of the substance or mixture and uses advised against

This information is not available.

1.3 Details of the supplier of the safety data sheet

Company	: EXAGON AG Räffelstrasse 10
Telephone Telefax E-mail address	8045 Zürich : +41 44 430 36 76 : +41 44 430 36 66 : <u>info@exagon.ch</u>

1.4 Emergency telephone number

+41 44 430 36 76

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Acute aquatic toxicity, Category 1	H400: Very toxic to aquatic life.
Chronic aquatic toxicity, Category 2	H411: Toxic to aquatic life with long lasting effects.

Classification (67/548/EEC, 1999/45/EC)

Harmful	R22: Harmful if swallowed.
Dangerous for the environment	R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic
	environment.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

according to Regulation (EC) No. 1907/2006



Version 1.0	Revision Da	ate 09.01.2014	Print Date 10.02.2015
Hazard pictograms			
Signal word	: Warning	×	
Hazard statements	: H302 H400 H411	Harmful if swallowed. Very toxic to aquatic life Toxic to aquatic life wit	
Precautionary statements	 Prevention: P270 P273 P261 Response: P391 P370 + P378 P370 + P378 P370 + P378 P312 Disposal: P501 	Do not eat, drink or smoke when using this product. Avoid release to the environment. Avoid breathing dust. Collect spillage. In case of fire: Use for extinction: Special powder for metal fires.	

Bronzing Powder – Art. 48210 / 48220 / 48230

Hazardous components which must be listed on the label: 7440-50-8 copper

2.3 Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No.	Classification	Classification	Concentration
	EC-No.	(67/548/EEC)	(REGULATION	[%]
	Registration number		(EC) No	
			1272/2008)	
copper	7440-50-8	Xn-N; R22-	Acute Tox. 4; H302	>= 50 - <= 100
	231-159-6	R50/53	Aquatic Acute 1;	
			H400	

according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230

Version 1.0	Revision Date 09.01.2014	Print Date 10.02.2015	
	Aquatic Chro H411	nic 2;	
	rases mentioned in this Section, see Section 16 atements mentioned in this Section, see Section		
SECTION 4: First aid meas	ures		
4.1 Description of first aid me	asures		
General advice	: Move out of dangerous area. Show this safety data sheet to the docto	r in attendance.	
	Move the victim to fresh air.		
	Do not leave the victim unattended.		
If inhaled	 If unconscious place in recovery position advice. If symptoms persist, call a physician. 	n and seek medical	
In case of skin contact	: Wash off immediately with soap and ple	Wash off immediately with soap and plenty of water.	
In case of eye contact	 Flush eyes with water as a precaution. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specia 	list.	
If swallowed		Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.	
4.2 Most important symptoms	s and effects, both acute and delayed		
Symptoms	: No information available.		
Risks	: No information available.	No information available.	
4.3 Indication of any immedia	temedical attention and special treatment ne	eded	
Treatment	: No information available.		

according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230

Version 1.0

Revision Date 09.01.2014

Print Date 10.02.2015

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Special powder against metal fire, Dry sand, ABC powder
Unsuitable extinguishing media	:	Water, High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during	: Do not allow run-off from fire fighting to enter drains or water
firefighting	courses.

5.3 Advice for firefighters

Special protective equipment for firefighters	: Wear self contained breathing apparatus for fire fighting if necessary.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions :	Avoid dust formation. Avoid breathing dust. Use personal protective equipment. Evacuate personnel to safe areas.
------------------------	---------------------------------------------------------------------------------------------------------------------------

6.2 Environmental precautions

Environmental precautions	Prevent product from entering drains.	
	Prevent further leakage or spillage if safe to do so.	
	If the product contaminates rivers and lakes or drains inform	
	respective authorities.	

according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230

Version 1.0	Revision Date 09.01.2014	Print Date 10.02.2015

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	: Keep in suitable, closed containers for disposal.
	Use mechanical handling equipment.
	Pick up and transfer to properly labelled containers.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Avoid formation of respirable particles. Do not breathe vapours/dust. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.
		Avoid creating dust. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.
Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
		Normal measures for preventive fire protection.
Hygiene measures	:	When using do not eat or drink. When using do notsmoke. Wash hands before breaks and at the end of workday.
		General industrial hygiene practice. Do not smoke. Wash hands before breaks and at the end of workday. Keep away from food and drink. Keep away from tobacco products.
Conditions for safe storage, in	cl	uding any incompatibilities

Requirements for storage areas and containers	: Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.
	Electrical installations / working materials must comply with the technological safety standards.

7.2

according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230

Version 1.0	Revision Date 09.01.2014	Print Date 10.02.2015
	Keep away from sources of ignition store near combustible materials. Ke closed in a cool, well-ventilated plac quality, do not store in heat or direct	eep containers tightly e. To maintain product
Further information on storage conditions	: Protect from humidity and water.	
Advice on common storage	: Keep away from oxidising agents, st strongly acid materials in order to av Do not store together with oxidizing	oid exothermic reactions.
Other data	: Keep in a dry place. No decomposition as directed.	on if stored and applied
Dampness	: Keep in a dry, cool and well-ventilate	edplace.

7.3 Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
copper	7440-50-8	TWA (Inhalable)	10 mg/m3	2011-12-01	GB EH40
Further information		includes dust of equal to or great or 4 mg.m-3 8-h dust will be subju- levels. Some du exposure to thes no specific short	inition of a substand any kind when pres er than 10 mg.m-3 our TWA of respirat ect to COSHH if peo sts have been assig se must comply with -term exposure limi posure should be u	ent at a concent 8-hour TWA of i ole dust. This me ople are expose and specific WE the appropriate t is listed, a figure	tration in air nhalable dust eans that any d above these ELs and limit.Where
copper	7440-50-8	TWA (Respirable)	4 mg/m3	2011-12-01	GB EH40
Further informa	ation	The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any		tration in air nhalable dust	

according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230

sion 1.0		Revisi	on Date 09.01.2014		Print Date 10.02.20
		levels. Som exposure to no specific s	subject to COSHH if e dusts have been a these must comply short-term exposure m exposure should b	ssigned specific V with the appropria limit is listed, a fig	VELs and te limit.Where
copper	7440-50-8	TWA	1 mg/m3	2005-04-06	GB EH40
copper	7440-50-8	STEL	2 mg/m3	2005-04-06	GB EH40
copper	7440-50-8	TWA	0.2 mg/m3	2005-04-06	GB EH40
Further infor	mation	is not the ca be applied t condensed melted subs by a chemic breakdown.	ume' is often used to ase for exposure limi o solid particles gen- from the gaseous sta stances. The genera cal reaction such as o Where no specific sl times the long-term	ts where ['] fume' sh erated by chemica ate, usually after v tion of fume is ofte oxidation or therm hort-term exposure	ould normally al reactions or olatilisation from an accompanied al e limit is listed, a
DNEL: copper (7440	-50-8)	Exposu Potenti	e: Workers are routes: Skin conta al health effects: sho 273 mg/kg		effects
DNEL:					
copper (7440	-50-8)	Exposu Potenti	e: Workers ire routes: Inhalation al health effects: sho 20 mg/m3		effects
DNEL: copper (7440	-50-8)	Exposu Potenti	e: Workers Ire routes: Skin conta al health effects: Ion 137 mg/kg		effects
DNEL: copper (7440	-50-8)	Exposu Potenti	e: Consumers ire routes: Skin conta al health effects: sho 273 mg/kg		effects
DNEL: copper (7440-	-50-8)		e: Consumers ire routes: Inhalation		

according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230

Version 1.0	Revision Date 09.01.2014	Print Date 10.02.2015
	Potential health effects: short term – sy Value: 20 mg/m3	stemic effects
PNEC: copper (7440-50-8)	: Soil Value: 65.5 mg/kg	
PNEC: copper (7440-50-8)	: Fresh water Value: 0.0078 mg/l	
PNEC:		
copper (7440-50-8)	Fresh water sediment Value: 87 mg/kg	
PNEC:		
copper (7440-50-8)	Marine water Value: 0.0052 mg/l	
PNEC: copper (7440-50-8)	: Marine sediment Value: 676 mg/kg	
PNEC: copper (7440-50-8)	: STP Value: 0.230 mg/l	
8.2 Exposure controls		
Personal protective equipme	nt	
Eye protection	: Eye wash bottle with pure water	
	: Safety glasses	
Hand protection		
Hand protection Material	: Leather	
Remarks	: The suitability for a specific workplace s with the producers of the protective glov	
	: Leather gloves The choice of an appropriate glove doe its material but also on other quality fea from one producer to the other.	

according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230

Version 1.0	Revision Date 09.01.2014	Print Date 10.02.2015
	The exact break through time can be protective glove producer and this h Recommended preventive skin prote	as to be observed.
Skin and body protection	: Dust impervious protective suit	
	Choose body protection according to concentration of the dangerous subs	
	: Anti-static and fire resistant protectiv 533; EN 1149-1. Anti-static safety sh	
	Recommended preventive skin prote	ection
Respiratory protection	 Use suitable breathing protection if v requires. Respirator with a dust filter P1 filter 	workplace concentration
Environmental exposure cor General advice	 Prevent product from entering drains Prevent further leakage or spillage if If the product contaminates rivers ar respective authorities. 	safe to do so.
	:	
Water	:	
	: The product should not be allowed to courses or the soil.	o enter drains, water

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: powder
Colour	: copper
Odour	: odourless
рН	: no data available

according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230

Version 1.0	Revision Date 09.01.2014	Print Date 10.02.2015
Freezing point	: no data available	
Boiling point/boiling range	: 2,597 °C	
Flash point	: no data available	
Bulk density	: no data available	
Flammability (solid, gas)	: no data available	
Auto-flammability	: no data available	
Upper explosion limit	: no data available	
Lower explosion limit	: no data available	
Vapour pressure	: no data available	
Density	: no data available	
Water solubility	: no data available	
Solubility in other solvents	: no data available	
Partition coefficient: n-octanol/wate	er : no data available	
Auto-ignition temperature	: no data available	
Thermal decomposition	: no data available	
Viscosity, dynamic	: no data available	
Viscosity, kinematic	: no data available	
Flow time	: no data available	
9.2 Other information		

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed. No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions	: No decomposition if stored and applied as directed.	
	Stable under recommended storage conditions., No hazards to be specially mentioned.	

according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230 Version 1.0 Revision Date 09.01.2014 Print Date 10.02.2015 Dust may form explosive mixture in air. 10.4 Conditions to avoid Conditions to avoid : no data available no data available **10.5 Incompatible materials** Materials to avoid : no data available **10.6 Hazardous decomposition products** Other information : no data available **SECTION 11: Toxicological information** 11.1 Information on toxicological effects Acute toxicity no data available Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitisation no data available Carcinogenicity no data available Toxicity to reproduction/fertility no data available Reprod.Tox./Development/Teratogenicity Page 11 / 15

according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230

Version 1.0	Revision Date 09.01.2014	Print Date 10.02.2015
no data available		
STOT - single exposure		
no data available		
STOT - repeated exposure		
no data available		
Aspiration toxicity		
no data available		
Further information		
Product		
no data available		

SECTION 12: Ecological information

12.1 Toxicity

<u>Components:</u> copper (7440-50-8) :	
M-Factor :	10
12.2 Persistence and degradability	
no data available	
12.3 Bioaccumulative potential	
no data available	

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

Page 12 / 15

according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230

Version 1.0	Revision Date 09.01.2014	Print Date 10.02.2015
12.6 Other adverse effects		
— • •		

Product:

Additional ecological : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Very toxic to aquatic life., Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

European Waste Catalogue	: 12 01 04 - non-ferrous metal dust and particles
13.1 Waste treatment methods	
Product	 The product should not be allowed to enterdrains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number	
ADR	: 3077
IMDG	: 3077
ΙΑΤΑ	: 3077
14.2 Proper shipping name	
ADR	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
	(Copper metal powder)
IMDG	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

according to Regulation (EC) No. 1907/2006



/ersion 1.0	Revision Date 09.01.2014	Print Date 10.02.201
	(Copper metal powder)	
ΙΑΤΑ	: ENVIRONMENTALLY HAZARDOU: N.O.S.	SSUBSTANCE, SOLID,
	(Copper metal powder)	
4.3 Transport hazard class		
ADR	: 9	
IMDG	: 9	
ΙΑΤΑ	: 9	
4.4 Packing group		
ADR		
Packaging group	: 111	
Classification Code	: M7	
Hazard identification No	: 90	
Labels	: 9	
Tunnel restriction code	: (E)	
IMDG		
Packaging group	: 111	
Labels	: 9	
EmS Number	: F-A, S-F	
ΙΑΤΑ		
Packing instruction (cargo aircraft)	: 956	
Packing instruction (passenger aircraft)	: 956	
Packing instruction (LQ)	: Y956	
Packaging group	: 111	
Labels	: 9	
4.5 Environmental hazards		
IMDG	: Marine pollutant	
ADR	: Environmentally hazardous	

Bronzing Powder - Art. 48210 / 48220 / 48230

14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code no data available

according to Regulation (EC) No. 1907/2006



Bronzing Powder – Art. 48210 / 48220 / 48230

Version 1.0

Revision Date 09.01.2014

Print Date 10.02.2015

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Water contaminating class : nwg not water endangering (Germany)

15.2 Chemical Safety Assessment

no data available

SECTION 16: Other information

Full text of R-Phrases

R22	Harmful if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects
	in the aquatic environment.

Full text of H-Statements

H302	Harmful if swallowed.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.